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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,801	07/30/2003	Naoto Abc	00862.002955.1	7926
5514	7590	08/10/2007	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LIANG, REGINA	
ART UNIT	PAPER NUMBER			
	2629			
MAIL DATE	DELIVERY MODE			
08/10/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/629,801	ABE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Regina Liang	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 June 2007.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 32, 35, 39-41, 47, 50 and 51 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 32, 35, 39-41, 50 is/are allowed.  
 6) Claim(s) 47 and 51 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                   |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|                                                                                                            | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. This Office Action is responsive to amendment filed 6/14/07. Claims 32, 35, 39-41, 47, 50 and 51 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 47 and 51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant's remarks filed on 6/14/07, states that Fig. 38 and page 82, line 10 provides support for amended claim 47. The cited section on page 82, line 10 states "As shown in Fig. 38, the signal PPRE changes to high level immediately before a modulated signal (XDPi) rises to high level (active), i.e., at the start of the horizontal scanning period, and falls to low level simultaneously when the modulated signal reaches high level. For example, the signal PPRE rises 1  $\mu$ sec before the modulated signal reaches high level, and falls to low level simultaneously when the modulated signal reaches high level. In Fig. 38, reference numeral 95 denotes crosstalk

of the modulated signal X4 arising from the fall of the adjacent modulated signal X3 to the potential Vas; 96, crosstalk of the modulated signal X4 arising from the fall of the modulated signal X3 from the potential Vas to GND (which are the same as in the fourth and fifth embodiments); and 97, a state in which the potential of a modulated-signal wiring rises to the potential Vas before the modulated signal X4 rises.”, however, the cited section does not provide support for the limitation “in the first portion, a signal level of the pulse rises up to a first predetermined level which is lower than a maximum level of the pulse signal and is maintained at the first predetermined level during a first predetermined time period, and wherein in the second portion, a signal level of the pulse falls down to a second predetermined level which is lower than the maximum level of the pulse signal and is maintained at the second predetermined level during a second predetermined time period” as is now claimed in claim 47.

***Claim Rejections - 35 USC § 102***

5. Claims 47, 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Amano (US Patent No. 4,021,607).

As to claims 47, 51, Amano discloses an image display apparatus comprising: a plurality of display devices (1, Fig. 5) wired in a matrix through a plurality of scanning signal wirings (X1-X5, Fig. 5) and a plurality of modulated signal wirings (A1 to D4, Fig. 5); and a driving circuit (Fig. 5) configured to apply modulated signal having a pulse width (see Fig. 9) to each of said plurality of modulated signal wirings, wherein at least one pulse signal has a first portion at the leading edge of the pulse signal and a second portion at the trailing edge of the pulse signal, wherein in the first portion, a signal level of the pulse rises up to a first predetermined level

which is lower than a maximum level of the pulse signal and is maintained at the first predetermined level, and wherein in the second portion, signal level of the pulse falls down to a second predetermined level which is lower than the maximum level of the pulse signal and is maintained at the second predetermined level (e.g. a shown in Fig. 9, the gray scale level 3 at the first 1/4<sup>th</sup> time period has a leading edge rising up to a level which is lower than the maximum level as shown in level 15, and the falling edge of the gray scale level 3 at the second 1/4<sup>th</sup> time period has a level lower than the maximum level).

***Allowable Subject Matter***

6. Claims 32, 35, 39-41, 50 are allowed.

***Response to Arguments***

7. Applicant's arguments filed 6/14/07 have been fully considered but they are not persuasive.

Applicant's remarks regarding claim 47 on pages 7-8 are not persuasive. Fig. 9 of Amano shows that the gray scale level 3 has a leading edge rising up to a level for the first 1/4<sup>th</sup> time period, the level is lower than the maximum level as shown in level 15, and the falling edge of the gray scale level 3 for the second 1/4<sup>th</sup> time period has a level lower than the maximum level. Therefore, the broadly claims are met by Amano.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Regina Liang  
Primary Examiner  
Art Unit 2674